FCC 95-80

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Review of the Pioneer's	)	ET Docket No. 93-266
Preference Rules	)	

SECOND REPORT AND ORDER AND FURTHER NOTICE OF PROPOSED RULE MAKING

Adopted: February 28, 1995; Released: March 1, 1995

Comment Date: March 29, 1995
Reply Comment Date: April 12, 1995

By the Commission:

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I. INTRODUCTION

1. The Second Report and Order (Second R&O) addresses proposals set forth in the Notice of Proposed Rule Making (Notice)[1] in this proceeding and modifies certain rules regarding our pioneer's preference program. This program provides preferential treatment in our licensing processes for parties that make significant contributions to the development of a new service or to the development of a new technology that substantially enhances an existing service. These rules will apply to all proceedings in which pioneer's preference requests have not yet been the subject of tentative pioneer's preference decisions.[2] The Further Notice of Proposed Rule Making (Further Notice) proposes rules in response to the pioneer's preference directives contained in the legislation implementing domestically the General Agreement on Tariffs and Trade (GATT),[3] as well as on our own motion. The GATT legislation requires, inter alia, that we complete, within six months of the December 8, 1994 enactment date (i.e., by June 8, 1995), a rulemaking prescribing the procedures and criteria to be used in evaluating pioneer's preference requests accepted for filing after September 1, 1994. We propose to apply the rules adopted in response to the Further Notice to any pioneer's preference requests granted after adoption of these rules, regardless of when the requests were accepted for filing, except in proceedings in which tentative pioneer's preference decisions have been made.

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[1] See Review of the Pioneer's Preference Rules, Notice of Proposed Rule Making, ET Docket No. 93-266, 8 FCC Rcd 7692 (1993).

[2] See n. 46, infra.

[3] Uruguay Round Agreements Act, Pub. L. No. 103-465, Title VIII, § 801, 108 Stat. 4809, 5050 (1994), to be codified at 47 U.S.C. § 309(j)(13) (GATT legislation).

II. BACKGROUND

2. Our pioneer's preference rules provide a means of extending preferential treatment in our licensing processes to parties that demonstrate their responsibility for developing new communications services and technologies.[4] Under these rules, a necessary condition for the award of a preference is that the applicant demonstrate that it has developed the capabilities or possibilities of a new technology or service, or has brought the technology or service to a more advanced or effective state. The applicant must also demonstrate that the new service or technology is technically feasible by submitting either the results of an experiment or a technical showing. Finally, a preference is granted only if the service rules adopted are a reasonable outgrowth of the applicant's proposal and lend themselves to grant of the preference. A pioneer's preference recipient's license application will not be subject to mutually exclusive applications.

3. The Notice sought comment on whether and how the pioneer's preference rules could be amended to take into account our new competitive bidding authority and our past experience administering them, or whether they should be repealed. In the Notice, we stated that the pioneer's preference rules were established and have been used in the context of our being limited to random selection and comparative hearings for selecting licensees from among mutually exclusive applicants. We noted that because comparative hearings have tended to be time-consuming and costly for both potential licensees and our staff, and have resulted in delays in providing service to the public, we generally have favored the use of random selection over hearings. We also indicated that the pioneer's preference rules were promulgated to create a significant incentive for innovators to submit proposals for new services and technologies in return for the guarantee of a license, but that the establishment of competitive bidding authority created a new dynamic for the assignment of licenses. Specifically, we stated that a bidder, who may also happen to be an innovator, may now obtain a license directly by outbidding other mutually exclusive applicants, whether by using its own financial resources or by soliciting the aid of financial institutions and venture capitalists. We further noted that Congress authorized use of competitive bidding methods only when multiple, mutually exclusive applications are filed.[5]

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[4] The pioneer's preference regulations are codified at 47 C.F.R. §§ 1.402, 1.403, 5.207 (1993). See Establishment of Procedures to Provide a Preference, GEN Docket No. 90-217, Report and Order, 6 FCC Rcd 3488 (1991) (Pioneer's Preference Report and Order); recon. granted in part, Memorandum Opinion and Order, 7 FCC Rcd 1808 (1992) (Pioneer's Preference Recon. Order); further recon. denied, Memorandum Opinion and Order, 8 FCC Rcd 1659 (1993) (Pioneer's Preference Further Recon. Order); see also Memorandum Opinion and Order on Remand, ET Docket No. 93-266 and GEN Docket No. 90-314, 9 FCC Rcd 4055 (1994), appeal pending sub nom. American Personal Communications v. FCC, No. 94-1549 (D.C. Cir. filed August 10, 1994).

[5] See 47 U.S.C. § 309(j)(1).

4. Based on the above considerations, in the Notice we solicited comment on whether our pioneer's preference rules continue to be appropriate in an environment of competitive bidding. Specifically, we solicited comment on whether competitive bidding permits innovative parties to have a reasonable expectation of obtaining licenses and on whether small businesses would be affected differently from other concerns by retention or repeal of the rules. Alternatively, we requested comment on whether, if we retain the preference rules, we should amend them to better work with our competitive bidding authority. Specifically, we solicited comment on alternatives to awarding licenses outright, such as simply designating pioneering parties in a Report and Order establishing a new service or technology, but not guaranteeing these parties licenses; and, as an added incentive, discounting bids by designated pioneers by some specific amount or percentage. We also sought comment on the issue of whether we should require payment for a guaranteed license awarded to a pioneer.

5. Additionally, in the Notice we solicited comment on a number of administrative changes to the pioneer's preference rules. We stated that our current policies of issuing public notices specifying filing deadlines, considering raw experimental license material that relates to preference requests, and making initial determinations on preference requests may burden unnecessarily both our staff and the public, and proposed to eliminate these policies. We also proposed that pioneer's preference requests must be filed prior to a notice of inquiry (NOI) in a proceeding that addresses a new service or technology, if such a document is issued in advance of a notice of proposed rulemaking (NPRM), rather than the current policy of allowing requests to be filed after an NOI but prior to an NPRM. We further proposed to limit acceptance of pioneer's preference requests to services that use new technologies, and to clarify that innovative technology is a necessary prerequisite for award.

6. Finally, in the Notice we addressed the issue of application of any new pioneer's preference rules to pending pioneer's preference requests. We stated that, as a matter of equity, nothing in the review of the pioneer's preference rules would affect the two pioneer's preferences that already had been awarded to Volunteers in Technical Assistance (VITA) in the non-voice, non-geostationary mobile satellite service below 1 GHz and Mobile Telecommunication Technologies Corporation (Mtel) in the 900 MHz narrowband Personal Communications Services (PCS) proceeding.[6] We solicited comment on whether any repeal or amendment of our rules should apply to three proceedings in which, at that time, Tentative Decisions, but not Orders, had been issued,[7] and we proposed to apply any changes to

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[6] See, respectively, Report and Order, ET Docket No. 91-280, 8 FCC Rcd 1812 (award to VITA); and First Report and Order, GEN Docket No. 90-314 and ET Docket No. 92-100, 8 FCC Rcd 7162 (1993), on recon., Memorandum Opinion and Order, 9 FCC Rcd 1309 (1994) (award to Mtel), appeal pending sub nom. BellSouth Corp. v. FCC, No. 93-1518 (D.C. Cir. filed August 20, 1993).

[7] See Tentative Decision and Memorandum Opinion and Order, GEN Docket No. 90-314, 7 FCC Rcd 7794 (1992) (pioneer's preferences tentatively awarded to American Personal

pioneer's preference proceedings that had not reached the tentative decision stage.

7. The First Report and Order (First R&O) in this review proceeding determined that any modifications to the pioneer's preference rules would not be applied to the three proceedings in which Tentative Decisions had been issued.[8] Subsequently, however, we decided that both Mtel and any pioneers in these three proceedings must pay for their licenses. In the Mtel licensing order,[9] we stated that we found authority under Section 4(i) of the Communications Act to condition Mtel's license on the payment of an appropriate charge,[10] and required Mtel to pay 90 percent of the lowest winning bid for a comparable license or $3,000,000 less than the lowest winning bid for a comparable license, whichever is less.[11] With respect to the three proceedings in which, at the time the Notice was adopted, only Tentative Decisions had been issued, we determined that payment would be required. In broadband PCS, we decided that pioneers who will receive Channel Block A in a Major Trading Area (MTA), must pay either 90 percent of the winning competitive bid for Channel Block B in their MTA or 90 percent of the adjusted value of the license, calculated based upon the average per population price established by competitive bidding for Channel Blocks

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Communications (APC), Cox Enterprises, Inc. (Cox), and Omnipoint Communications, Inc. (Omnipoint) in the 2 GHz broadband PCS proceeding); Notice of Proposed Rule Making, Order, Tentative Decision and Order on Reconsideration, CC Docket No. 92-297, 8 FCC Rcd 557 (1993) (pioneer's preference tentatively awarded to Suite 12 Group in the 28 GHz Local Multipoint Distribution Service proceeding); and Notice of Proposed Rule Making and Tentative Decision, ET Docket No. 92-28, 7 FCC Rcd 6414 (1992) (no tentative pioneer's preferences awarded in the above 1 GHz low-Earth orbit satellite proceeding). Subsequently, we finalized our pioneer's preference awards to APC, Cox, and Omnipoint in the broadband PCS proceeding; see Third Report and Order, GEN Docket No. 90-314, 9 FCC Rcd 1337 (1994), recon. denied, Memorandum Opinion and Order, FCC 94-304 (released December 2, 1994); appeals pending sub. nom, Advanced Cordless Technologies, Inc. v. FCC, No. 95-1003 (D.C. Cir. filed January 3, 1995); Qualcomm Inc. v. FCC, No. 95-1055 (D.C. Cir. filed January 23, 1995); Advanced Mobile Comm Technologies, Inc. v. FCC, No. 95-1060 (D.C. Cir. filed January 23, 1995); Viacom International Inc. v. FCC, No. 95-1074 (D.C. Cir. filed January 30, 1995).

[8] See First Report and Order, ET Docket No. 93-266, 9 FCC Rcd 605 (1994), recon. denied, Memorandum Opinion and Order, FCC 94-276 (released November 3, 1994).

[9] See Memorandum Opinion and Order, File No. 22888-CD-P/L-94, 9 FCC Rcd 3635 (1994); appeal pending sub. nom, Mobile Telecommunication Technologies Corp v. FCC, No. 94-1552 (D.C. Cir. filed August 11, 1994).

[10] Id., 9 FCC Rcd 3643 at ¶ 33.

[11] Id., 9 FCC Rcd 3641 at ¶ 20.

A and B in the top ten MTAs.[12]

8. The GATT legislation changed the payment formula for broadband PCS pioneer's preference licensees to 85 percent of the adjusted value of each license, calculated based upon the average per population price established by competitive bidding for Channel Blocks A and B in the twenty largest MTAs that do not include MTAs awarded to pioneers. The legislation also prohibited any further administrative or judicial review of the broadband PCS pioneer's preference awards and the license grants based on the awards. With regard to other preference licensees, the GATT legislation requires any such licensees whose pioneer's preference requests were accepted for filing after September 1, 1994 to pay in a lump sum or in installment payments over a period of not more than five years 85 percent of the average price paid for comparable licenses. The legislation also directs the Commission to prescribe regulations specifying the procedures and criteria by which we will evaluate pioneer's preference requests accepted for filing after September 1, 1994, including: 1) specifying the procedures and criteria by which the significance of such a contribution will be determined, after an opportunity for review and verification by experts not employed by the Commission; and 2) such other procedures as may be necessary to prevent unjust enrichment by ensuring that the value of a pioneering contribution justifies any reduction in the amounts paid for comparable licenses.[13] The GATT legislation does not apply to licenses issued before August 1, 1994,[14] and it sunsets the pioneer's preference program on September 30, 1998.[15]

III. DISCUSSION -- SECOND R&O

A. Effect of Competitive Bidding Authority

9. Retention of Pioneer's Preference Program. Parties commenting to the Notice generally support continuance of the pioneer's preference program. They maintain that the program has encouraged innovation and that competitive bidding does nothing to undermine it. For example, Advanced Mobilecomm Technologies, Inc. and Digital Spread Spectrum Technologies, Inc. (AMT/DSST) states that retention of the pioneer's preference program will further the specific goal articulated in the Budget Reconciliation Act of 1993 (Reconciliation Act) of ensuring the continued participation of small businesses, minorities, women, and rural telephone companies. According to AMT/DSST, the pioneer's preference program has proven successful by unleashing creative energies in the research and development of new

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[12] See Memorandum Opinion and Order on Remand, supra n. 4.

[13] Section 309(j)(13)(D) of the Communications Act, as amended, to be codified at 47 U.S.C. § 309(j)(13)(D).

[14] Id. § 309(j)(13)(G).

[15] Id. at § 309(j)(13)(F).

communications services and products. AMT/DSST concludes that even if it is assumed that competitive bidding reduces the risks associated with the innovation of new spectrum-based services and technologies, it does not affect the risks associated with the rulemaking process, including the risks of disclosure of innovative new services and technologies through the experimentation, research, and public documentation necessary to support a rulemaking.

10. The Appellant Parties[16] state that competitive bidding does not affect or supplant the significant public interest benefits obtained by the pioneer's preference program. According to these parties, an innovator, having already expended time and resources in developing a new technology or new application of technology, should not be required to participate in any license award competition, whether it be comparative hearing, random selection, or competitive bidding. They contend that it is encouragement to innovation that lies at the heart of the pioneer's preference rules and which serves the public interest. The Appellant Parties conclude that competitive bidding awards the affluent company or investor, not the source of innovative thought and application.

11. Omnipoint argues that there is no incentive for an entrepreneur to innovate if its only reward is the right to bid against large companies in order to be able to use its innovations. Also, in Omnipoint's view, competitive bidding revenue is increased by the public disclosure of ideas that the preference process brings forth. Further, according to Omnipoint, achieving diversity in the ownership of licenses and the provision of services means that other mechanisms besides competitive bidding must be used to allocate licenses. Finally, Omnipoint contends that because we require entrepreneurs to submit petitions for rule making, thus disclosing their ideas and innovations, competitive bidding without preferences would drive all innovation underground.

12. Arraycomm, Inc. (Arraycomm) and Satellite CD Radio (SCDR) assert that competitive bidding increases the need for pioneer's preferences. In Arraycomm's view, there is no basis for substantive alteration of the rules because the cost to the pioneer of competitive bidding would be added to capital expenditures that it must undertake in developing a new telecommunications technology. According to SCDR, the pioneer has already incurred millions of dollars of debt in the service development and spectrum allocation processes, while the remaining licensees have a significantly reduced cost structure. SCDR concludes that pioneer's preferences and competitive bidding should be seen as solutions to different problems, because preferences encourage improvements in the allocation process, whereas competitive bidding increases the efficiency of initial license assignments.

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[16] The Appellant Parties are Adams Telcom, Inc.; Advanced Tel., Inc.; Columbia Wireless Limited Partnership; East Ascension Telephone Company, Inc.; Middle Georgia Personal Communications; Paramount Wireless Limited Partnership; Reserve Telephone Company, Inc; Reserve Telecommunications and Computer Corp.; and Tri-Star Communications, Inc.

13. Finally, Ameritech supports broadening the pioneer's preference program, contending that results of the program have been significant. However, Ameritech proposes that we consider awarding preferences based upon a scheme that recognizes gradations of innovative effort. According to Ameritech, such an approach would recognize the relative worth of each pioneer's contribution to the technical art or service under consideration by awarding an amount of spectrum and geographic service area commensurate with the value of the contribution.[17]

14. Those favoring repeal of the pioneer's preference program contend that competitive bidding authority provides a solution to the problem that existed when only random selection and comparative hearing procedures were available to assign licenses. For example, Henry Geller, co-author of the petition for rule making that led to the establishment of the pioneer's preference rules,[18] states that preferences are unnecessary in a competitive bidding environment because competitive bidding permits the party that values a license the most to obtain it without the significant delay and transaction cost involved in random selection. BellSouth maintains that the preference policy does not work and that enactment of competitive bidding legislation eliminates any justification for creating special incentives to innovate. Digital Satellite Broadcasting Corporation argues that our authority to use competitive bidding eliminates the basis for the pioneer's preference rules, and that the rules are unsound as a matter of law and policy. Southwestern Bell Corporation (SBC) asserts that the preference rules are no longer viable because of competitive bidding. In SBC's view, under competitive bidding, the forces of a free market will ensure the proper allocation of spectrum and in so doing encourage financial institutions and backers to advance capital to entrepreneurs whose proposed uses have commercial merit.

15. As discussed under Unjust Enrichment and Competitive Bidding, infra, we believe that competitive bidding affects our pioneer's preference program. The GATT legislation directs us to maintain the program until September 30, 1998 for preference requests accepted for filing after September 1, 1994, and we believe that terminating the program for requests filed on or before that date -- even if desirable -- would accord inconsistent treatment to preference requests simply because of the date on which they were submitted for filing. We do not see a valid reason to distinguish preference requests on that basis.[19] Accordingly, we

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[17] Ameritech filed its comments one day late and accompanied them with a "Motion to Accept Late File (sic) Comments." Because no party opposed this Motion, and in order to ensure a complete record in this proceeding, we are herein granting the Motion, and have considered Ameritech's comments in reaching our decision in the Second R&O.

[18] See Petition for Rule Making submitted by the Washington Center for Public Policy Research, July 14, 1989.

[19] We also are not modifying the pioneer's preference program in accord with Ameritech's proposal regarding gradations of innovative effort, because we believe that adoption of this proposal would add an unnecessary complication to the program, particularly

are retaining the program not only for pioneer's preference requests accepted for filing after September 1, 1994, but also for those accepted for filing on or before that date.

16. Payment by Pioneers. Several parties commenting to the Notice assert that if the pioneer's preference program is maintained, pioneers should be required to pay for their preference grant in services in which licenses are assigned by competitive bidding. Some of those favoring payment contend that a pioneer has an inherent competitive advantage over other entities by virtue of it being guaranteed a license, and that awarding a pioneer its license without payment could give it an insuperable advantage. For example, PageMart, Inc. (PageMart) states that preferences were not intended to result in a financial windfall, that other applicants for licenses are disadvantaged by a preference grantee's ability to capitalize on the certainty of its license, and that these applicants would be further disadvantaged if they were forced to shoulder a substantial financial burden that is not imposed on the grantee.

17. Pacific Bell and Nevada Bell (PB/NB) recommend that in services in which licenses are awarded by competitive bidding, preference grantees pay a fee equal to the lowest winning bid for that geographic area. Other parties state that such grantees should be required to participate in the bidding process. American Portable Telecommunications argues that the Commission should grade innovative proposals and award bid enhancements ranging in size from a low of 5% to a high of 20%, based upon the grade given to each innovator. NYNEX Corporation (Nynex) concurs that it would be inappropriate to exclude preference grantees from competitive bidding. According to Nynex, a firm that has developed an efficiency-enhancing technology or an innovative new service is likely to be willing to pay more for spectrum than a firm that plans to offer traditional services using existing technology. However, Nynex recommends that innovators be eligible for discounts and the same financial arrangements offered to "designated entities" under the proposed competitive bidding rules.[20] In Nynex's view, discounts and other special arrangements are particularly well-suited to promote innovation in the capital-intensive telecommunications industry, in which many innovators are likely to face financial challenges in bringing their technological developments to customers. AMT/DSST states that the Commission may find an adequate basis in the Reconciliation Act to prospectively modify the pioneer's preference rules to assure that the potential rewards of a preference are reasonably related to the financial risks incurred by the preference applicant. According to AMT/DSST, the Commission could award bid preferences to a pioneer in a multiple of the total expenditures incurred in its pioneering activities.

18. Those opposing payment maintain that charging pioneers would eliminate the incentive to develop a new service or technology. They contend that pioneers already have

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in services in which licenses are awarded by competitive bidding. As discussed in paragraph 22, infra, we are imposing a discounted license charge on pioneers in such services.

[20] See, e.g., Implementation of Section 309(j) of the Communications Act Competitive Bidding, PP Docket No. 93-253, Second Report and Order, 9 FCC Rcd 2348 (1994).

spent large sums of money to obtain preferences and that requiring payment would place them at a competitive disadvantage. For example, Cablevision Systems Corporation (Cablevision) states that pioneers would likely be able to raise capital only by diluting their investments via partnership arrangements with financiers. Suite 12 Group states that since many smaller entrepreneurial entities exist solely by virtue of the technologies that they have pioneered, entry into the marketplace via a pioneer's preference may provide the only means for such entities to recoup their costs. Accel Partners argues that if the Commission chooses to diminish or charge for preference awards, this action would discourage future entrepreneurs and their potential investors.

19. We find persuasive the argument by several commenting parties that not requiring a pioneer's payment would be inequitable to other licensees and would result in a financial advantage to certain competitors in services in which licenses are assigned by competitive bidding. As we stated in the broadband PCS remand order, when we established the pioneer's preference rules "[w]e did not contemplate rewarding an innovator by giving it a license for free while its competitors had to pay, because at that time no one paid for initial licenses."[21] Specifically, as discussed in more detail in the broadband PCS remand order,[22] we are concerned that providing free licenses to pioneers has the potential to distort the competitive bidding process and provide pioneers with a financial advantage over their competitors. Further, we believe that free licenses would contribute toward an uneconomic allocation of the spectrum to the extent that recipients of free licenses do not value the spectrum as much as other bidders, especially where licenses are highly interdependent. Finally, we believe that free licenses could result in "unjust enrichment" to pioneers to the extent that their contributions justify only a discounted spectrum payment. As Congress recently recognized in the GATT legislation, payment by pioneers is "necessary to prevent unjust enrichment by ensuring that the value of any such contribution justifies any reduction in the amounts paid for comparable licenses" and to "recover for the public a portion of the value of the public spectrum resource by requiring [each pioneer's preference recipient], as a condition for receipt of its license, to agree to pay [for its license]."[23]

20. Although the payment mandate in the GATT legislation does not apply to pioneer's preference requests accepted for filing on or before September 1, 1994, we find the authority to impose license charges on these pioneers in Section 4(i),[24] in conjunction with Sections 1, 303(r), 307, 309, and 214,[25] of the Communications Act. Section 4(i) authorizes

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[21] See Memorandum Opinion and Order on Remand, supra n. 4, at ¶ 10.

[22] Id. at ¶¶ 9-19.

[23] See 47 U.S.C. § 309(j)(13)(D)(ii), (B).

[24] 47 U.S.C. § 154(i).

[25] 47 U.S.C. §§ 151, 303(r), 307, 309, 214(c).

the Commission to "perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with this Act, as may be necessary in the execution of its functions." As discussed in both the broadband PCS remand order and the Mtel licensing order, we could not rely upon Section 4(i) to contravene an express prohibition or requirement of the Act, as the language of Section 4(i) itself makes clear. Thus, if any provision of the Act prohibited the Commission from imposing a charge on a pioneer's preference recipient, Section 4(i) would not be an independent basis for such authority. But no provision of the Act addresses this issue, either expressly or implicitly.

21. Further, we find that imposing license charges is necessary in the execution of our licensing functions.[26] First, requiring payment by pioneer's preference licensees is "necessary" to properly carry out our public interest mandate in licensing spectrum-based services[27] inasmuch as an important aspect of the public interest is promoting competition to the extent feasible and taking appropriate regulatory steps to ensure that the competition is fair.[28] As we have found in other contexts, a pioneer's preference license free of charge would likely give the recipient a financial advantage over other licensees competing in the same markets, who would have to pay auction prices -- a result that would not serve the public interest. Second, requiring payment is "necessary and proper" in the execution of our functions under Section 309(j) to implement rational, fair competitive bidding systems. In certain communications services, the values of licenses could be significantly interdependent and thus the prices a bidder might be willing to pay -- or even the willingness to bid at all -- might be affected in various ways by the fact that a potential competitor's license will be available for no charge. For example, with one or more licenses already guaranteed to others free of charge, this might distort significantly the auction for comparable licenses and thereby undermine some or all of the purposes of utilizing competitive bidding. In this regard, we note that the auction statute before enactment of the GATT legislation does not limit our authority to require pioneer's preference recipients to pay for their licenses; it is neutral on this point.[29] Finally, requiring payment will serve Section 309(j)'s purpose of avoiding unjust enrichment, a concept not unique to the GATT legislation's amendments.[30]

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[26] See Memorandum Opinion and Order, supra n. 9, at ¶¶ 26-33 and Memorandum Opinion and Order on Remand, supra n. 4, at ¶¶ 29-34.

[27] See 47 U.S.C. §§ 307(a), 309(a), 214(a) and (c). See *also* 47 U.S.C. § 151.

[28] See National Ass'n of Regulatory Util. Comm'rs v. FCC, 525 F.2d 630, 636 and n. 27 (D.C. Cir), cert. denied, 425 U.S. 992 (1976). See also McLean Trucking Co. v. U.S., 321 U.S. 67, 86-88 (1944).

[29] See 47 U.S.C. § 309(j)(6)(b); H.R. Rep. No. 111, 103d Cong., 1st Sess. 257 (1993).

[30] See 47 U.S.C. § 309(j)(3)(C), (4)(E).

22. We therefore will impose a discounted license charge on pioneers in services in which licenses are awarded by competitive bidding. We find that the most equitable way to do this for all pioneers that have not yet received a license is to use the payment formula specified in the GATT legislation; i.e., pioneers will be required to pay in a lump sum or in installment payments over a period of not more than five years 85 percent of the average price paid for comparable licenses. While this legislation applies only to pioneer's preference requests that were accepted for filing after September 1, 1994, for reasons similar to those discussed in paragraph 15, supra, we find that applying a different payment formula to requests filed on or before that date would accord inconsistent treatment to requests simply because of their filing date. We do not see a valid reason to distinguish preference requests on that basis. The GATT legislation also provides the Commission discretion, except in the case of broadband PCS, to identify licenses that are "most reasonably comparable in terms of bandwidth, scope of service area, usage restrictions, and other technical characteristics to the license awarded to the [pioneer's preference recipient], and excluding licenses that the Commission determines are subject to bidding anomalies due to the award of preferential treatment."[31] We intend to apply the same type of comparable license analysis in the pending pioneer's preference proceedings if any preferences are awarded.

23. We reject the proposals offered by American Portable Telecommunications and Nynex to require preference grantees to participate in the competitive bidding process while allowing them discounts and special financial arrangements. As noted above, we have decided to maintain the pioneer's preference program and to continue to guarantee a license to preference recipients. Accordingly, we will continue to preclude the filing of mutually exclusive license applications against pioneer's preference recipients, thus exempting these licenses from competitive bidding procedures.[32] We believe that allowing pioneers the certainty of obtaining licenses rather than forcing them to participate in competitive bidding with a credit will provide some of the necessary certainty to obtain the financing necessary for their investments and will also encourage them to make the showings necessary to obtain preferences. We note that these showings may entail the disclosure of certain proprietary information that can lessen the value of innovations and increase the value of licenses to others.

B. Administrative Amendments to the Pioneer's Preference Rules

24. Filing Timelines and Elimination of Public Notices and Tentative Decisions. Parties commenting on the Notice support our proposal regarding filing timelines, as well as our proposals to eliminate the current procedures of issuing public notices that specify filing deadlines and making initial determinations on pioneer's preference requests. Arraycomm states that changing the administrative rules as proposed appears to comport with our

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[31] 47 U.S.C. § 309(j)(13)(B)(i), (iv).

[32] See 47 U.S.C. § 309(j)(1), (j)(13)(D).

pioneer's preference objectives, and In-Flight Phone Corporation (In-Flight) maintains that we may appropriately streamline the rules to define more clearly those parties whose innovations are entitled to preferences and to change the manner in which preference applications are processed. More specifically, AMT/DSST asserts that tentative decisions improperly determine preference grantees at an early stage, and that preferences should not be awarded until final rules have been issued. Similarly, Cablevision endorses the elimination of early comments on preference requests before issuance of proposed rules. According to Cablevision, what appear to be promising technologies at the early stages of development of a service may have little relevance as the service comes closer to fruition.

25. We concur with commenting parties that we should eliminate our procedure of issuing public notices specifying filing deadlines and making initial determinations on preference requests at the NPRM stage of a proceeding that addresses use of a new technology or service. We originally imposed these requirements to ensure a complete record in all pioneer's preference proceedings. However, the burden imposed by these requirements in prior proceedings convinces us that eliminating them will result in a more efficient process with no detriment to the public. We also find it in the public interest to require that preference requests be filed prior to an NOI, if such a document is issued in advance of an NPRM. Deferring the filing deadline to the NPRM stage in cases in which an NOI has been issued may encourage speculative pioneer's preference requests.[33] Each preference request complying with revised Section 1.402 of our Rules will be listed without evaluation in the NPRM, and comment will be solicited on each request.[34] A determination on whether to grant a preference request will normally be made in a Report and Order, if such an Order authorizes use of a new technology or service.[35]

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[33] To be eligible for consideration for a preference, a preference request must be submitted prior to the Sunshine Notice announcing consideration of the NOI or NPRM at an agenda meeting. In the case of a non-agenda (circulation) NOI or NPRM, the preference request must be submitted prior to submission of the NOI or NPRM to the Commission for vote.

[34] We note that in the Digital Audio Radio Services (DARS) proceeding, GEN Docket No. 90-357, while no tentative decision has been adopted regarding pioneer's preference requests, a Report and Order has been issued allocating spectrum for satellite DARS; see FCC 95-17, released January 18, 1995. Also, a Public Notice establishing a filing deadline for the submission of satellite DARS pioneer's preference requests has been issued; see 8 FCC Rcd 3167 (1993). Accordingly, there is no further opportunity to submit satellite DARS pioneer's preference requests.

[35] In some circumstances, it may not be possible to make a pioneer's preference determination at the time of the Report and Order. In those circumstances, the pioneer's preference determination will be made as soon as feasible after the Report and Order.

26. Summaries of Experimental Data. The commenting parties were generally silent on our proposal to require preference applicants to be more selective in submitting experimental license material that relates to preference requests. However, those parties that did address this issue support our proposal. For example, Arraycomm states that the proposal appears to comport with our stated objective of streamlining the pioneer's preference rules. In-Flight offers general support for this proposal and our other administrative proposals, to help eliminate frivolous preference requests and reduce our regulatory burden.

27. We will adopt our proposal to require pioneer's preference applicants to incorporate only relevant experimental material into its preference request, rather than submitting its entire experimental file as part of the request. In its preference request, an applicant will be required to specifically document the technical feasibility of an innovation with respect to a new technology or service. If the applicant has performed experimental testing and wishes to make that testing part of its technical feasibility showing, it will be required to summarize the testing in its request, specifically addressing how the underlying experimental data support its showing. The underlying data will typically be made available for public inspection as part of the separate experimental license file so that interested parties (or Commission-appointed experts) may examine such data as it relates to the summary prepared in support of the preference request.

28. Innovative Technology. Comments were mixed on our proposal to limit acceptance of pioneer's preference requests to services that use new technologies, and to clarify that innovative technology is a necessary basis for award. PB/NB and Omnipoint state that they agree with this proposal, and BellSouth states that not only should a new technology be required, but that any preference should be conditioned on use of the technology for which the preference was awarded. PageMart concurs that preference grantees should be required to build the systems for which they have received preferences. However, CELSAT, Inc. (Celsat) argues that it is difficult to determine what constitutes a new technology. Therefore, Celsat maintains that we should continue to examine each preference request to determine whether it represents significant technological and/or service innovations. Motorola Satellite Communications, Inc. (Motorola) asserts that a service not currently provided or a significant enhancement of an existing service can be achieved not only through the development of new technologies, but also by combining existing technologies in new and innovative ways. PCN America, Inc. (PCNA) maintains that there is no justification for refusing to give a preference based on innovative proposals for new services. According to PCNA, to some extent technological innovation already has its own reward in the patent and licensing process, whereas new services do not reap any reward other than in the pioneer's preference process. Qualcomm, Inc. (Qualcomm) proposes that the Commission specify the exact nature of the technology it deems pioneering and clarify that an innovative technology that can be applied to more than one service is eligible for a preference in all services that are not existing at the time the preference request is filed. Finally, PageMart recommends that a preference grant be limited to the principal geographic area in which experimental testing was performed.

29. Based on the record, we believe that a change in policy to limit acceptance of pioneer's preference requests to services that use new technologies is unnecessary. We agree with Celsat that, in some instances, it may be difficult to evaluate whether a technology is new, and we agree with Motorola that a new communications service or a significant enhancement of an existing service may, under some circumstances, be achieved by combining existing technologies in new and innovative ways. Thus, we will retain our rule that provides that preferences are available for new services or enhancements to existing services through the use of innovative technologies.[36] However, we will continue to deny preference awards in new services to parties simply for transferring existing technologies from existing services in one band to similar services in another band.[37] Such proposals will not be considered innovative under the rule.

30. With respect to Qualcomm's recommendation that we specify the exact nature of the technology we deem pioneering, we have consistently done this in each pioneer's preference proceeding. Both our tentative and final decisions have detailed the technologies we have found pioneering, as well as our other reasons for awarding preferences.[38] Regarding Qualcomm's recommendation that we clarify that an innovative technology that can be applied to more than one service is eligible for a preference in all services that are not existing at the time the preference request is filed, we disagree. Once a pioneer's preference has been granted for a service that uses a new technology, that technology is no longer new. While it is obviously beneficial to the public if a technology can be used in more than one service, our goal in establishing, and continuing to maintain, the preference rules is not to repeatedly reward the same innovation. We find that granting a pioneer's preference in the first service that was developed or enhanced by the innovative technology is sufficient incentive to encourage proposals to be submitted.

31. With regard to BellSouth's and PageMart's recommendations that any preference grant should be conditioned on use of the technology and system for which the preference

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[36] See 47 C.F.R. § 1.402(a). We note that in para. 51, infra, we are proposing to eliminate pioneer's preferences for services that do not require a new spectrum allocation.

[37] In the broadband PCS proceeding, for example, we denied several pioneer's preference requests because they were merely compilations or aggregations of existing communications technologies or systems already being used in other communications services and thus were not innovative proposals. See Tentative Decision and Memorandum Opinion and Order, supra n. 7, at ¶ 26; and Third Report and Order, supra n. 7, at ¶¶ 96, 138, 175, 181, 190, 215, 235, 237, 249, 275, 293, and 301. Further, in the above 1 GHz low-Earth orbit satellite proceeding, we tentatively denied all five pioneer's preference requests for similar reasons. See Notice of Proposed Rule Making and Tentative Decision, supra n. 7, at ¶¶ 36, 39, 43, 46, and 49.

[38] See, for example, Third Report and Order in the broadband PCS proceeding, supra note 7, at paras. 1 and 10-74.

was awarded, we agree that this change to our rules is desirable. We believe that this change will ensure that preference applicants do not propose technically sophisticated but economically impractical communications systems, and preserves the integrity of the pioneer's preference program. We note that we have already applied this policy for both broadband and narrowband PCS preference grants.[39] Clearly, if a party is a pioneer of a new technological system, the party should be rewarded only if in practice that system is viable. In addition, we are also codifying the requirements mandated for both narrowband and broadband PCS licensees that transfers of pioneer's preference licenses be prohibited until specified build-out requirements have been met.[40]

32. We disagree with PageMart's recommendation that a preference grant be limited to the principal geographic area in which experimental testing was performed. While in most cases a preference grant will be for the principal experimental area, in some cases an experiment may be unnecessary.[41] In other cases, the grantee may find it more desirable to perform an experiment in other areas where it may not desire or qualify for a pioneer's preference license.[42] We emphasize, however, that applicants must specify the area for which a preference is sought and may obtain a preference for only one area.[43]

C. Pending Pioneer's Preference Requests

33. Several commenting parties state that applying any modifications to the pioneer's preference rules to pending requests would unfairly penalize applicants that filed preference requests under the current rules. For example, In-Flight asserts that these applicants risked time and money to develop innovative proposals in reliance on rules that had been designed specifically to encourage such risk-taking. Celsat concurs, and contends that if any pending application merits a preference under existing rules, the Commission should grant it with all the rights currently associated with a grant. Arraycomm argues that it would be inequitable to retroactively impose new rule changes on preference requests that were on file prior to adoption of the Notice.

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[39] See, respectively, Third Report and Order, GEN Docket No. 90-314, supra n. 7, at ¶ 8; Memorandum Opinion and Order, GEN Docket No. 90-314 and ET Docket No. 92-100, supra n. 6, at ¶ 47.

[40] See Memorandum Opinion and Order, supra n. 6, at ¶ 50; and Third Report and Order, supra n. 7, at ¶ 9.

[41] See Pioneer's Preference Recon Order, supra n. 4, at ¶ 10.

[42] See Establishment of Local Multipoint Distribution Service, CC Docket No. 92-297, Notice of Proposed Rulemaking, Order, Tentative Decision and Order on Reconsideration, 8 FCC Rcd 557, 566 ¶¶ 64-65 (1993) (tentative award to Suite 12 group).

[43] See 47 C.F.R. §§ 1.402 and 5.207.

34. Other parties argue that it would be appropriate for the Commission to apply modifications to the pioneer's preference rules to existing proceedings. For example, Nextel Communications, Inc. (Nextel) states that not only can we apply modifications to the pioneer's preference rules to existing proceedings in which Tentative Decisions have not been made, but under the notice and comment rule making-type procedures involved, we are free to revise, modify, and reverse tentative conclusions based on the record developed in response to our solicitation for comments. Paging Network, Inc. states that under established legal precedent, we have the authority to change the eligibility rules to the detriment of pending applications, and PageMart asserts that Congress has made clear that we have broad discretion to modify the preference system in light of competitive bidding authority, and that this discretion includes the authority to change the nature of the award or the conditions precedent for receipt of the award.

35. We concur with those parties who contend that we are not legally permitted to engage in retroactive rule making (except in cases in which a statute explicitly permits such rule making). However, we disagree that applying the modifications that we have adopted herein to pioneer's preference requests that have not reached the Tentative Decision stage constitutes retroactive rule making. As discussed by Nextel, under the notice and comment rule making-type procedures involved, we had the clear legal authority to apply rule modifications to the three Tentative Decisions discussed in the First R&O,[44] and ultimately did so.[45] Applying amended rules to preference requests that have not reached the Tentative Decision stage is even more obviously within our legal authority.

36. Additionally, we find it equitable to apply new rules to these proceedings. Each of the parties in these proceedings applied for a pioneer's preference before competitive bidding was authorized; therefore, none of these parties applied for a preference on the basis that it would receive for free a license for which others would have to pay. Further, since none of these parties has been awarded even a tentative preference, no party can claim that it had received the expectation of an award under existing pioneer's preference rules and that it therefore had reason to believe that changes to these rules would not apply to them.[46]

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[44] For a discussion of court cases related to retroactive rulemaking, see First R&O, supra n. 8, at n. 24.

[45] See Memorandum Opinion and Order on Remand, supra n. 4.

[46] The following companies submitted pioneer's preference requests on or before September 1, 1994 that are pending: 1) AfriSpace, Inc., filed 7/30/91, not placed on public notice (International Satellite Sound Broadcasting); 2) Crescomm Transmission Services, Inc., filed 12/12/91, placed on public notice 3/11/92 (PP-34 in RM-7912) (Digital Shipboard Earth Stations); 3) Cruisecom International, Inc., filed 4/10/92 in RM-7912, not placed on public notice (Digital Shipboard Earth Stations); 4) Digital Satellite Broadcasting Corporation, filed 6/2/93 in GEN Docket No. 90-357, not placed on public notice (Satellite Digital Audio Radio Services); 5) In-Flight Phone Corporation, filed 10/30/92, not placed on public notice

IV. DISCUSSION -- FURTHER NOTICE

A. Implementation of the GATT Legislation

37. Section 309(j)(13)(D) of the Communications Act, as amended by the GATT legislation, provides that:

> the Commission shall prescribe regulations specifying the procedures and criteria by which the Commission will evaluate applications for preferential treatment in its licensing processes (by precluding the filing of mutually exclusive applications) for persons who make significant contributions to the development of a new service or to the development of new technologies that substantially enhance an existing service.
>
> Such regulations shall--
>
> > (i) specify the procedures and criteria by which the significance of such contributions will be determined, after an opportunity for review and verification by experts in the radio sciences drawn from among persons who are not employees of the Commission or by any applicant for such preferential treatment; [and]
> > (ii) include such other procedures as may be necessary to prevent unjust enrichment by ensuring that the value of any such

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(Air/Ground Audio Service); 6) Inner Ear Communications, Inc., filed 5/21/93, not placed on public notice (Low-Power Audio Service); 7) Primosphere Limited Partnership, filed 6/2/93 in GEN Docket No. 90-357, not placed on public notice (Satellite Digital Audio Radio Services); 8) ProNet Inc., filed 7/30/91, placed on public notice 1/31/92 (PP-23 in RM-7784) (Electronic tracking service); 9) Satellite CD Radio, Inc., filed 7/30/91, supplements filed 1/23/92 and 6/2/93, original request and first supplement placed on public notice 1/31/92 (PP-24 in GEN Docket No. 90-357) (Satellite Digital Audio Radio Services), second supplement not placed on public notice; and 10) Strother Communications, Inc., filed 7/30/91, placed on public notice 1/31/92 (PP-25 in GEN Docket No. 90-357) (Terrestrial Digital Audio Radio Services).

Additionally, pioneer's preference requests were filed after September 1, 1994 by Nextel Communications, Inc., on October 6, 1994 (Specialized Mobile Radio); and by Holmdel Telecommunications Group, Inc,. on December 8, 1994 (Digital Shipboard Earth Stations) (Holmdel states that it is the successor-licensee to Crescomm Transmission Services, Inc. in the provision of on-going broadband maritime experimentations; see Request for Pioneer's Preference, at 4).

Action on all of the above requests, as well as on any other requests that may be received prior to the conclusion of the instant rulemaking proceeding, will be deferred until the proceeding is concluded.

> contribution justifies any reduction in the amounts paid for comparable licenses under this subsection.[47]

Section 309(j)(13)(B) provides that:

> The Commission shall recover for the public a portion of the value of the public spectrum resource made available to [a pioneer's preference recipient] by requiring such person, as a condition for receipt of the license, to agree to pay a sum determined by--
>
> (i) identifying the winning bids for the licenses that the Commission determines are most reasonably comparable in terms of bandwidth, scope of service area, usage restrictions, and other technical characteristics to the license awarded to such person, and excluding licenses that the Commission determines are subject to bidding anomalies due to the award of preferential treatment;
>
> (ii) dividing each such winning bid by the population of its service area (hereinafter referred to as the per capita bid amount);
>
> (iii) computing the average of the per capita bid amounts for the licenses identified under clause (i);
>
> (iv) reducing such average amount by 15 percent; and
>
> (v) multiplying the amount determined under clause (iv) by the population of the service area of the license obtained by such person.[48]

Section 309(j)(C) states that the Commission shall require pioneer's preference recipients to pay the sum required by the above formula in a lump sum or in guaranteed installment payments, with or without royalty payments, over a period of not more than 5 years.[49]

38. Procedures and Criteria. We tentatively conclude that, with the exceptions of the two areas discussed below, the existing pioneer's preference rules, as modified in this Second R&O, comply with the GATT legislation's requirement to specify procedures and criteria by which to evaluate pioneer's preference applications. They set forth specific requirements to inform pioneer's preference applicants of the procedures with which they must comply in order to be considered for a preference and, we believe, also give the Commission predictable

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[47] 47 U.S.C. § 309(j)(13)(D).

[48] Id. § 309(j)(13)(B).

[49] Id. § 309(j)(13)(C).

guidelines to follow in determining whether a given proposal is innovative.[50] However, we solicit comment regarding any alternatives to any aspects of these general rules and procedures that might better achieve the objectives of the GATT legislation.

39. Peer Review. The GATT legislation's directive that the Commission establish a procedure for review and verification by outside experts was contemplated as an optional measure by our current pioneer's preference policies. In the Pioneer's Preference Report and Order, we stated that "peer review" may be used on a case-by-case basis.[51] We propose to formalize this policy pursuant to the GATT legislation to provide an "opportunity" for peer review of potentially pioneering proposals by experts in the radio sciences who are not Commission employees. We seek comment on whether such review by outside experts should be required in all cases or whether pioneer's preference applicants (or other interested parties) should be given only an "opportunity" for such review, which may be either accepted or declined by the applicants.

40. With regard to whether review by outside experts is mandatory under GATT, we seek further comment on the possible interpretations of the other component of this provision relating to "any applicant for such preferential treatment." First, Section 309(j)(13)(D)(i) could be interpreted to mean that our rules must provide either: (1) an opportunity for review and verification by experts in the radio sciences drawn from among persons who are not employees of the Commission; or (2) an opportunity for review and verification by any applicant seeking a pioneer's preference. Second, the section could be interpreted to mean that our rules must provide an opportunity for review and verification by experts in the radio sciences drawn from among persons who are neither employees of the Commission nor employees of any applicant seeking a pioneer's preference. The first interpretation would appear to expand the Commission's discretion as how to proceed with the "review and verification" of the merits of pioneer's preference requests, whereas the second interpretation would impose an additional measure to prevent potential conflicts of interest in the evaluation of preference proposals.

41. While we seek comment on which of these interpretations is correct, we nevertheless tentatively conclude that, employing aspects of both interpretations, it would be desirable to establish a peer review process on a permanent basis. In this regard, we propose to delegate to the Chief of the Office of Engineering and Technology ("Chief, OET") the authority to select a panel of experts consisting of persons who are knowledgeable about the specific technology set forth in a pioneer's preference request and who are neither employed by the Commission or by any applicant seeking a pioneer's preference in the same or similar communications service. Based on our experience with the pioneer's preference program, we tentatively conclude that the outside expertise required to evaluate the claims made in

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[50] See 47 C.F.R. Section 1.402, as modified herein.

[51] See n. 4, supra , 6 FCC Rcd 3494 ¶ 50.

pioneer's preference requests will vary greatly; e.g., in some cases one or two individuals may be able to sufficiently evaluate the claims made in a very short period, whereas in other cases several individuals may need to spend a substantial amount of time to sufficiently evaluate the claims and report to the Commission. Accordingly, we believe that our staff should evaluate on a case-by-case basis how much outside assistance is required and solicit such assistance. While we could empanel a permanent pool of experts from which one or more persons could be selected in a given case depending on their area of expertise, we are of the tentative view that, given the wide array of potential new technologies and services which we may now not anticipate, it would be preferable to allow the Chief, OET to select experts from all available sources after reviewing the proposed new technology or service.

42. Once empaneled, we propose that the experts would generally be granted a period of up to 180 days to present their findings to the Commission. We seek comment on whether we should generally seek the experts' individual opinions or their consensus (as a Federal Advisory Committee under the Federal Advisory Committee Act). We tentatively conclude that the Commission should not be bound to follow the recommendations of the panel, but that it should evaluate the recommendations in light of all the submissions and comments in the record. However, we solicit comment on whether the views of the panel (especially where consensus is reached) should be entitled to greater, or perhaps controlling, deference. We also seek comment on what restrictions, if any, the panel members should have vis-a-vis contact with the applicants; e.g., whether they should have authority to seek further information pertaining to the preference request or to perform field evaluations.[52] We also seek comment on any additional conflict of interest requirements (e.g., related to financial interests) we should impose upon outside experts.

43. Unjust Enrichment and Competitive Bidding. The GATT legislation requires continuation of the pioneer's preference program through September 30, 1998, and directs the Commission to identify comparable licenses and apply the payment formula set forth in section 309(j)(13)(B)(i)-(v) to determine how much to charge a pioneer's preference recipient for its license. In addition, Section 309(j)(13)(D)(ii) provides that our implementing regulations must include "other procedures as may be necessary to prevent unjust enrichment by ensuring that the value of any such contribution justifies any reduction in the amounts paid for comparable licenses." Our concerns about unjust enrichment are lessened by the statutorily-mandated payment requirement for pioneer's preference grantees in auctionable services and the formula for calculating per capita bid amounts. Nonetheless, we remain concerned about the effect of competitive bidding on the pioneer's preference program.

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[52] We note that if a pioneer's preference request is formally opposed, the proceeding pertaining to that request becomes restricted and ex parte presentations are prohibited. See 47 C.F.R. Sections 1.1202(e) and 1.1208(c). The great majority of pioneer's preference requests

44. The awarding of pioneer's preferences was designed to induce companies to undertake the risky research and development necessary to introduce new and innovative services to consumers. In contrast to other portions of the economy, these innovations require access to spectrum to appropriate the rewards of the risky upfront investment. In some instances, patents may provide innovators with sufficient protection and profitability so that they will have an incentive to innovate. For example, a number of the companies that did not receive pioneer's preference awards in broadband PCS are attempting to market their technologies to other potential licensees and are able to compete in the marketplace as suppliers rather than as licensees. However, in other instances, it may not be possible to fully realize the rewards by simply being a supplier. In those cases, our pioneer's preference grants, which ensure that innovators can become licensees, may help to stimulate innovation.

45. In services in which we use competitive bidding to assign licenses, the need to guarantee a license may not be as strong as in services where another assignment method is used. For example, if an innovator has a valuable idea and can capitalize on it by obtaining a license in a service in which licenses are awarded by competitive bidding, it should not be eligible for a pioneer's preference. Such an applicant is able to obtain the financing for both the innovative research and the license acquisition cost. Further, if the rewards of the innovation do not cover both the research and the license costs, the innovation may not be socially beneficial, and it may be undesirable for the Commission to subsidize these costs by awarding pioneer's preference licenses at below market values.

46. We also note that there may be circumstances in which our guarantee of a license at or close to market price may stimulate research such that the innovator receives certainty in obtaining financing to perform the necessary research and to pay for the license. In services in which licenses are not awarded by competitive bidding, the combination of the riskiness of innovative research into new techniques and services combined with the riskiness of obtaining a license may make financing more difficult. However, in services in which licenses are awarded by competitive bidding, investors are assured that innovators will receive licenses at or near the price others pay for comparable licenses. This may encourage financing because investors know that the innovator is less likely to overpay for its license.

47. Accordingly, because competitive bidding affects our pioneer's preference program, to qualify for a pioneer's preference in services in which licenses are awarded by competitive bidding, we seek comment on an additional showing by a preference applicant. Specifically, we seek comment on whether the applicant should have to demonstrate that our public rulemaking process, which requires the innovator to disclose proprietary information, inhibits it from capturing the economic rewards of its innovation unless it is granted a pioneer's preference license; i.e., whether the applicant must show that it may lose its intellectual property protection because of our public process. We note that in many other contexts, including the patent area, innovation is also subject to imitation or other competition. Therefore, we seek comment on whether the applicant should show that the damage to its intellectual property protection is more significant than in these other contexts. If this requirement were to be adopted, the applicant would have to demonstrate that it would be

able to capture the rewards from its innovation only by being granted a guaranteed license. This requirement would be in addition to the other requirements specified in Section 1.402 of our Rules.

48. We are aware that in most instances it will be unclear when a pioneer's preference request is filed whether assignments in the proposed service will be made by competitive bidding or some other method. We therefore seek comment on whether in its pioneer's preference request each applicant should make the above-described demonstration regarding intellectual property protection to ensure that it will retain its eligibility for a preference.

49. Payment Formula. With regard to determining which licenses are most reasonably comparable under Section 309(j)(13)(B)(i), we must necessarily implement this provision on a case-by-case basis. Nevertheless, we seek comment on any standards for comparing licenses and excluding anomalous licenses that we might codify into our rules along with the statutory formulas for determining the average "per capita bid amount" and the payment amount. Finally, we seek comment on the implementation of the installment payment provision in Section 309(j)(13)(C). We tentatively conclude that, as in our competitive bidding proceeding, we will not adopt any installment payment scheme that includes royalty payments.[53] We seek comment on whether eligibility for installment payments should be limited to small businesses or other entities as we have done in our general auction rules.[54] We propose that, if an entity receiving a pioneer's preference award and license in a particular service would be eligible for installment payments in the auction for that service, that entity should be able to pay for its pioneer's preference license in installments under similar terms and conditions. Thus, for example, interest rates and enhancements such as interest-only payment periods would be comparable to those of other similarly situated licensees that obtain their licenses at auction (but without the pioneer's preference 15 percent discount). However, in accordance with the GATT legislation, a pioneer's installment payment term (if the pioneer is eligible) could not exceed five years.[55] We propose to require a pioneer's preference licensee that is not eligible for installment payments to pay in one lump sum within a reasonable time (e.g., 30 days) after the auction for comparable licenses has concluded or after the license grant becomes final, whichever is later.

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[53] See Second Report and Order, supra note 20, at ¶¶ 193, 253.

[54] See id., at ¶¶ 233-240; see also, e.g., Fifth Report and Order, PP Docket No. 93-253, FCC 94-178 at ¶¶ 135-141 (released July 15, 1994), on recon., 10 FCC Rcd 403 (1995), at ¶¶ 101-104.

[55] 47 U.S.C. § 309(j)(13)(C).

B. Other Matters

50. In accord with the GATT legislation, we propose to sunset the pioneer's preference program on September 30, 1998. Between now and that date, we would continue to evaluate the program and, if warranted, retain it. Comment is requested on the utility of the program, particularly in light of our new competitive bidding authority. One option would be to retain the program only for services in which licenses are not awarded by competitive bidding.

51. We also propose to modify our pioneer's preference rules by limiting the award of preferences to services in which a new allocation of spectrum is required.[56] Our experience with the pioneer's preference program convinces us that awarding preferences for enhancements of existing services where no new spectrum allocation is required is contrary to the public interest. Such a policy encourages developers of a technology that can be used in a variety of existing services to apply for a pioneer's preference in each of those services.[57]

52. We propose to apply the rules adopted in response to the Further Notice to any pioneer's preference requests granted after adoption of these rules, regardless of when the requests were accepted for filing, except in proceedings in which tentative pioneer's preference decisions have been made. Although the GATT legislation does not apply to pioneer's preference requests accepted for filing on or before September 1, 1994, we find the authority to apply any rule changes adopted in response to the Further Notice to these pioneer's preference requests in Section 4(i), in conjunction with Sections 1, 303(r), 307, 309, and 214, of the Communications Act. We will not issue final decisions in pioneer's preference proceedings that have not reached the tentative decision stage until after we issue a Third Report and Order in this proceeding regarding final rules that will apply to pending requests.

V. CONCLUSION

53. In view of our new authority to use competitive bidding to assign licenses and our experience administering the pioneer's preference rules, we are modifying these rules to better comport with competitive bidding and our experience. We believe that the changes we are adopting will increase the efficiency of the pioneer's preference program. We emphasize that

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[56] Because a new allocation of spectrum requires a change in our rules, adoption of this proposal would also mean that pioneer's preferences would no longer be granted for new technologies or services that could be implemented without a rule change.

[57] We also note that in many existing services there are no licenses available in major metropolitan areas, and so it would not be possible to award a pioneer's preference in those areas.

these changes strengthen the pioneer's preference program, which is to reward innovators of new spectrum-using services and technologies by granting them a significant benefit in our licensing processes. To comply with the recently-enacted GATT legislation, and on our own motion, we are also proposing additional changes to our pioneer's preference rules.

VI. PROCEDURAL INFORMATION

A. Regulatory Flexibility Act -- Second R&O

54. As required by Section 603 of the Regulatory Flexibility Act, the Commission has prepared a Final Regulatory Flexibility Analysis (FRFA) of the expected impact on small entities of the rules adopted in this document. The FRFA is set forth in Appendix B. The Secretary shall send a copy of this Second Report and Order, including the FRFA, to the Chief Counsel for Advocacy of the Small Business Administration in accordance with paragraph 603(a) of the Regulatory Flexibility Act. Pub. L. No. 96-354, 94 Stat. 1164, 5 U.S.C. §§ 601 et seq. (1988).

B. Ordering Clauses -- Second R&O

55. Accordingly, IT IS ORDERED that Parts 1 and 5 of the Commission's Rules ARE AMENDED as specified in Appendix A, effective 30 days after publication in the Federal Register. This action is taken pursuant to Sections 4(i), 7(a), 303(c), 303(f), 303(g), 303(r), and 309(j) of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154(i), 157(a), 303(c), 303(f), 303(g), 303(r), and 309(j). IT IS FURTHER ORDERED that Ameritech's Motion To Accept Late Filed Comments IS GRANTED.

C. Initial Regulatory Flexibility Analysis -- Further Notice

56. Pursuant to the Regulatory Flexibility Act of 1980, the Commission finds as follows:

A. Reason for Action

This action is being initiated to in response to directives contained in the GATT legislation and on our own motion.

B. Objective

The objective of this proposal is to implement the GATT legislation's modifications to the Communications Act and to make additional changes to the pioneer's preference rules to increase their efficiency.